

**PERSONAL COMPUTER INTEGRATED WITH
PERSONAL DIGITAL ASSISTANT****CROSS REFERENCE TO RELATED
APPLICATIONS**

[0001] This application is a continuation-in-part application of application Ser. No. 10/108,768, filed Mar. 28, 2002, the teachings of which are incorporated herein by reference.

FIELD OF THE INVENTION

[0002] This invention relates to Personal Computers (PCs) and Personal Digital Assistants (PDAs), and more particularly to a PC integrated with PDA functionality permitting a PC to operate in both a PC mode and a PDA mode.

BACKGROUND OF THE INVENTION

[0003] Personal Digital Assistants (PDAs) are growing in popularity especially among business travelers. There are a variety of PDAs on the market today that provide a variety of functions. Most PDAs manage personal information and, as such, perform such tasks as: storing contact information such as names, addresses, phone numbers, email addresses, etc.; writing memos or personal notes; keeping track of appointments; reminding a user of appointments, e.g., by audio alarm; planning projects; keeping track of expenses; and the like. In addition, some PDAs are also able to send and receive email, provide Internet access, play MP3 music files, play MPEG movie files, provide voice recording functionality, and provide other functionality.

[0004] A PC can also provide all the above PDA functions, where a PC includes a desktop computer or a laptop computer. However, compared to a PC, a PDA is smaller and lighter. As such, it is typically powered by small batteries, e.g., some models use alkaline (AAA) batteries. A PDA's size also enables it to be used practically anywhere. Compared to a PC, a PDA has a fast boot up sequence enabling it to be used within a couple of seconds after turning its power on. In addition, a PDA typically has simpler user input devices than a PC. For instance, PDA applications typically require activation of only a few buttons and don't require a larger, more detailed input device such as a keyboard.

[0005] Compared to a PC however, a PDA has several limitations. First, PDAs can be as expensive as a low end PC. Second, PDAs have relatively limited storage capacity given their size, e.g., PDAs cannot support high capacity storage devices such as a hard disk drive. Third, PDAs have limited input devices. For instance, most PDAs include a stylus and touch screen that lets a user launch programs by tapping on the screen with a pen-like stylus. This limits user input speed and makes it difficult to put long messages into the PDA. Fourth, PDAs have limited expansion capability. For instance, flash media card readers and certain universal serial bus (USB) connections may not be supported.

[0006] In other words, the advantages of the PDA are normally the drawbacks of a PC and vice versa. Accordingly, there is a need in the art for a PC that overcomes the above deficiencies in the prior art and can provide a PC integrated with PDA functionality that permits a PC to operate in both a PC mode and a PDA mode.

BRIEF SUMMARY OF THE INVENTION

[0007] A personal computer (PC) adapted to function as a personal digital assistant (PDA) consistent with the inven-

tion includes: a central processing unit (CPU) responsive to a control signal to load a first operating system or a second operating system, wherein the first operating system is run by the PC in a first PC mode and the second operating system is run by the PC in a second PDA mode, and wherein the PC operating in the PDA mode operates PDA software applications, wherein the PDA software applications are software applications selected from the group consisting of: Internet access applications, wireless Internet access applications, scheduling applications, address book applications, storage software applications, voice recording applications, Internet auction applications, electronic mail access applications, and Internet radio applications.

[0008] A method of automatically monitoring a plurality of third party bids in an on-line auction consistent with the invention includes the steps of: setting a target price; monitoring the plurality of third party bids automatically; comparing each of the plurality of third party bids to the target price; and notifying a PC user if one of the plurality of third party bids exceeds the target price.

[0009] Another method of automatically monitoring a plurality of third party bids in an on-line auction with a personal computer (PC) capable of operating in either a first PC mode or a second personal digital assistant (PDA) mode consistent with the invention includes the steps of: initiating a control signal; operating a second operating system in response to the control signal, wherein the second operating system operates the PC in the second PDA mode; accessing an Internet auction portal; setting a target price for a select auction; monitoring the plurality of third party bids automatically in the PDA mode; comparing each of the plurality of third party bids to the target price; and notifying a PC user if one of the plurality of third party bids exceeds the target price.

[0010] Another method of automatically monitoring a plurality of incoming electronic mail messages at a PC, wherein the PC is configured to operate in at least a first power state and a second power state, wherein the PC consumes less power in the second power state than the first power state, and wherein the PC is initially in the second power state, the method consistent with the invention including the steps of: waking up the PC automatically from the second power state to the first power state; checking for any of the plurality of incoming electronic mail messages; receiving any of the plurality of incoming electronic mail messages; and providing notice indicating receipt of any of the plurality of incoming electronic mail messages.

[0011] Another method of automatically monitoring a plurality of incoming electronic mail messages with a personal computer (PC) capable of operating in either a first PC mode or a second personal digital assistant (PDA) mode, wherein the PC is configured to operate in at least a first power state and a second power state, wherein the PC consumes less power in the second power state than the first power state, and wherein the PC is initially in the second power state, the method consistent with the invention including the steps of: initiating an automatic control signal to wake up the PC from the second power state to the first power state; operating a second operating system based on the control signal, wherein the second operating system operates the PC in the second PDA mode; checking for any of the plurality of incoming electronic mail messages;